AEDES THELCTER FROM THE LOWER COLORADO RIVER IN CALIFORNIA[1]

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Recent arbovirus surveillance along the lower Colorado River between Needles, CA and Yuma, AZ, revealed the presence of *Aedes purpureipes* Aitken with the capture of a small number of females in CDC traps baited with dry ice (Jakob et al. 1985) and CO_2 traps (Meyer et al. 1987). Subsequently, on the night of September 30, 1987, 14 adult females of *Aedes thelcter* Dyar were collected by CO_2 traps at 3 sites in Bard, Imperial County, CA. Females were collected at the intersection of Ross and Levee roads, along Levee Road near the Colorado River and on the Cocopah Indian Reservation near Haughtelin Lake. The maximum distance between capture points was approximately 8 km and indicated that *Ae. thelcter* may be well established in the Bard Valley area. Despite ongoing mosquito surveillance activities, *Ae. thelcter*, like *Ae. purpureipes*, possibly evaded previous detection as a consequence of low population densities and specialized breeding requirements.

Previously, the most western records for *Ae. thelcter* have been from west Texas (Carpenter and LaCasse 1955) and southeastern New Mexico (Miller et al. 1964) where larval development occurs in brackish oil field effluent and salt cedar (*Tamarix*) marshes. The Bard Valley collections represent a 750 km westward expansion in the range of *Ae. thelcter* in the southwestern United States (Arnell 1976, Darsie and Ward 1981). Since *Ae. thelcter* has not been reported from Arizona (Cochise, Pima and Santa Cruz counties) (McDonald et al. 1973), possibly as a consequence of the lack of suitable breeding habitats, the distribution of this species must be considered disjunct between populations in southeastern New Mexico and extreme southeastern California.

The CO_2 traps that collected the largest number of female *Ae. thelcter* (11 in 2 traps) were located along the periphery of a large overflow basin within the flood plane of the Colorado River on the Cocopah Indian Reservation near Haughtelin Lake. The basin contained numerous alkaline pools, several large ox bow lakes and supported a salt tolerant flora dominated by salt cedar, saltbush (*Atriplex*), arrowweed (*Pulchea*), and giant reed (*Arundo*). Although larvae of *Ae. thelcter* have yet to be collected from the Bard Valley, adult females were collected adjacent to habitats that were perhaps ecologically very similar to the salt cedar marshes found along the Pecos River in southeastern New Mexico (Miller et al. 1964). We presume that larval breeding of *Ae. thelcter* most likely occurred in alkaline pools that were flooded in mid-September following a period of heavy rainfall. Females of *Ae. thelcter* were collected in association with *Aedes taeniorhynchus* (Weidemann), *Aedes dorsalis* (Meigen), *Anopheles franciscanus* McCracken, *Culex erythrothorax* Dyar, *Culex quinquefasciatus* Say, *Culex tarsalis* Coquillett and *Psorophora confinnis* (Lynch-Arribalzaga).

In summary, 14 females of *Ae. thelcter* were collected in late September at 3 separate sites at Bard, California. These captures indicated the species was probably well established within the region. Hopefully, future surveillance will disclose the nature of the larval habitat and definitive associations with other indigenous mosquito species. Five females of *Ae. thelcter* collected at Bard, CA, have been deposited in the Dr. R. M. Bohart Museum of Entomology at the University of California, Davis.

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